

# Endangered Species

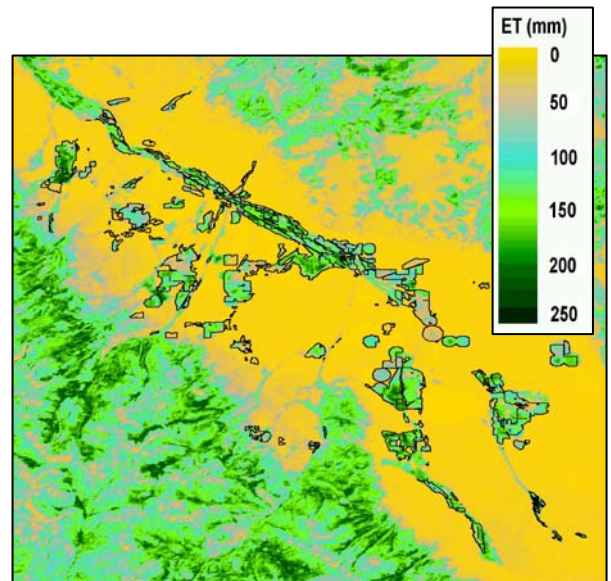
Some Idaho stream basins do not have not enough water to meet all the needs of irrigation and stream flow for fish. During drought years, irrigation can divert all the flow in a stream in some areas. Idaho is working with the National Marine Fisheries Service and the US Fish and Wildlife Service to develop an ESA Section 6 Conservation Plan for the Upper Salmon River Basin. The Section 6 Conservation Plan helps put in place measures that increase stream flow for endangered fish, and is intended to be a long-term solution to low levels of flow.

For the Lemhi River basin, planners needed to know the amount of evapotranspiration for lands irrigated by specific water rights above a certain point in the river. The evapotranspiration data are also used to assess consumptive use of water rights that may be leased under the Columbia Basin Water Transactions Program. The program is a Bonneville Power Authority-funded, National Fish and Wildlife Foundation-managed program to improve in-stream flows in the Columbia River Basin.



The Idaho Department of Water Resources used Landsat thermal data and the METRIC evapotranspiration model as part of the data used in negotiations with the National Marine Fisheries Service (NMFS). NMFS based flow augmentation by adding up the total diversions from Lemhi River. That number was unrealistically high because NMFS did not take into account return flows. The Idaho Department of Water Resources used METRIC evapotranspiration data and water-right polygons to convince NMFS that a realistic number for flow augmentation would be based on total consumptive use, not total diversion.

Landsat thermal data contributed directly to a negotiated solution that protects endangered fish while at the same time protects the fair use of water by irrigators.



Polygons of water rights on evapotranspiration for the month of July, 2000 in the Lemhi River Basin.